

OPEN RECRUITMENT
June 17, 2003
ATMOSPHERIC MODELER
Salary Range – \$75,024- \$91,192/Annually

The Bay Area Air Quality Management District (BAAQMD) is currently recruiting for an Atmospheric Modeler position in the Planning Division. This is a full time represented position. The Atmospheric Modeler, under direction, applies complex, sophisticated and scientific techniques and models to air quality problems; performs related work as assigned.

This specialized class is responsible for performing and applying complex, analytical and scientific work to air quality problems, including dispersion modeling. The work requires extensive knowledge of and expertise with specialized, powerful computers and their codes as well as knowledge of atmospheric science. Incumbents are expected to exercise significant independent judgment in the performance of these specialized duties, which may involve directing the work of others. This class is distinguished from Senior Atmospheric Modeler in that the latter assigns, directs and reviews the research staff and activities.

EXAMPLES OF DUTIES: Duties may include but are not limited to the following: Analyzes aerometric field data, and performs quality assurance and quality control for modeling applications. Installs, tests and evaluates state of science meteorological and photochemical models. Obtains and maintains advanced knowledge of the hardware necessary to operate these models. Prepares model inputs, including emissions inventory, conducts model simulations, analyzes and interprets modeling results and summarizes findings in reports. Develops methodologies to apply the complex meteorological and photochemical models to simulate, analyze and rank air quality control strategies in support of the District's air quality planning process; develops and applies techniques to: 1) test and critically evaluate the performance of each major component of a regional photochemical modeling system and of the system as a whole, 2) evaluate the uncertainties associated with the inputs to the modeling system, and 3) evaluate the resultant uncertainty in air quality projections derived from the modeling system. Designs and participates in field studies for the purpose of collecting data for modeling; organizes and directs the work of other staff on a project basis; establishes and maintains professional contacts and working relationships with modeling specialists outside the District.

QUALIFICATIONS: A typical way to obtain the knowledge and skills for the Atmospheric Modeler is the equivalent to a graduate degree in the physical sciences, atmospheric science, operations research or a closely related field and three years of experience in modeling and scientific research, including one year involving air quality or atmospheric sciences.

OTHER REQUIREMENTS: May require possession of a valid California driver's license and the ability to meet the automobile insurability requirements of the District. **Experience in Emissions Inventory processing for photochemical modeling is highly desirable.**

HOW TO APPLY: Interested individuals must submit a completed BAAQMD application along with their responses to the supplemental application questions to the Human Resources Office no later than **5:00 p.m. on Friday, July 18, 2003.** For an application packet, contact the Human Resources Office at 939 Ellis Street, Fourth Floor, San Francisco, CA 94109. Phone (415) 749-4980. Except as requested in this announcement, do not include any additional documents or attachments, such as letters of recommendation, performance evaluations, work samples, etc. They will not be considered. A resume may be included, but will not be accepted in lieu of an official BAAQMD application. Postmarks, faxes and e-mails will not be accepted.

The Human Resources Office will review all required application materials to assist in determining whether or not an applicant meets the minimum qualifications for the position.

For more than one vacancy, one additional applicant for each additional vacancy will be added to each of the following selection processes.

SELECTION PROCESS: Selection will be based on a competitive examination consisting of a work product exercise and interview. A qualifying training and experience evaluation based on your application materials (screening panel) and/or a panel interview weighted 100% may be held depending on the number of qualified applications received.

In the event that the qualified applicant pool does not include bargaining unit employees, the District may utilize whatever selection procedures deemed appropriate by the Human Resources Officer.

Persons with disabilities who may require reasonable accommodations during the application and/or selection process should notify the Human Resources Office at 415-749-4980.

CANDIDATES WILL BE SCREENED BASED ON THE FOLLOWING CRITERIA:

KNOWLEDGE OF:

- Theories, principles and practices of the physical sciences, including chemistry, physics and mathematics;
- Theories, principles and practices of meteorology, including atmospheric physics;
- Operation and optimization of large computer codes;
- Methods and techniques of developing and applying mathematical and statistical models;
- Interactions and relationships between emissions, meteorology and pollution concentrations;
- Principles and practices of electronic instrumentation and data communications;
- Theories, principles and practices of applied statistics;
- Principles, methods and techniques of research and data analysis;

SKILL IN

- Designing and implementing complex computer based models;
- Operating and optimizing large computer codes;
- Preparing clear and concise technical reports, journal articles, correspondence and other written materials;
- Evaluating and analyzing modeling results to develop recommendations for air quality regulatory actions and plans;
- Developing and maintaining documentation of computer files, models, input data results and utility programs;
- Applying mathematical and statistical models and techniques effectively;
- Designing and conducting complex research projects;
- Exercising sound independent judgment within established guidelines.

General information about BAAQMD can be found on our website at www.baaqmd.gov.

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